

CLAIMS

1. A refrigeration system (1) for vapor compression refrigeration cycle including a heat source circuit provided with a high temperature compressor (141) and a utilization circuit connected to the heat source circuit and provided with an evaporator (123) and a low temperature compressor (131), the refrigeration system (1) comprising:

an operation control means for switching the high temperature compressor (141) between actuated state and suspended state based on a refrigerant suction pressure; and

an actuation control means for actuating the low temperature compressor (131) to increase the refrigerant suction pressure of the high temperature compressor (141) when the high temperature compressor (141) is suspended and given conditions including a condition concerning a request for cooling in the evaporator (123) are met.

2. A refrigeration system (2) for vapor compression refrigeration cycle comprising:

an operation control means for switching a compressor (241) between actuated state and suspended state based on a refrigerant suction pressure; and

a reference value changing means for reducing a reference value of the refrigerant suction pressure for judging whether to actuate the compressor (241) or not when the compressor (241) is suspended and an outside air temperature is reduced from a predetermined temperature.

3. The refrigeration system (2) of claim 2, wherein

the reference value changing means is adapted to reduce the reference value in stages based on the amount of reduction in outside air temperature from the predetermined temperature.

4. A refrigeration system (3) for vapor compression refrigeration cycle comprising:

an operation control means for switching a compressor (341) between actuated state and suspended state based on a refrigerant suction pressure; and

5 a power supply control means for supplying open phase current to a motor of the compressor (341) to increase the refrigerant suction pressure increases when the compressor (341) is suspended, an outside air temperature is reduced from a predetermined temperature and a condition concerning a request for cooling in an evaporator (313) is met.